Texas Pollutant Discharge Elimination System Industrial Stormwater Permit TXR050000

Stormwater Pollution Prevention Plan (SWP3) Worksheet Instructions

The TCEQ Small Business and Local Government Assistance (SBLGA) Program developed these worksheets to help you develop a Stormwater Pollution Prevention Plan (SWP3) under the Texas Pollutant Discharge Elimination System (TPDES), Multi-Sector General Permit (MSGP) for stormwater discharges from industrial facilities. These worksheets are for guidance purposes only and cannot serve as a substitute for the requirements outlined in **Part III** (starting on page 42) of the MSGP relating to minimum SWP3 requirements.

General Facility Information: Worksheet 1

Limitations on Permit Coverage, Part II Section B.1.-10. (page 26 of TXR050000)

Your SWP3 must include a short description of the process(es) conducted at your facility and an explanation of any other industrial activities or facilities at this same location. The SWP3 must also identify bodies of water receiving stormwater discharges from your facility and explain whether or not those discharges may contribute to water quality impairment. Facilities located within the Edwards Aquifer Recharge Zone or Contributing Zone are subject to additional requirements.

Pollution Prevention Team: Worksheet 2

Pollution Prevention Team Members, Part III Section A.2.a (page 43)

Identify a specific individual or group of individuals within the facility as members of your Pollution Prevention Team. If the facility is not staffed on a continuous basis, an employee from a third party may be identified as part of the team. Additional members of the team may include environmental professionals who are under contract. Examples

of Pollution Prevention Team members within the facility may include, but are not limited to:

- environmental staff
- health and safety staff
- plant or facility operators
- plant or facility managers

Examples of Pollution Prevention team members from outside the facility may include, but are not limited to:

- corporate environmental staff
- corporate health and safety staff
- regional managers
- environmental consultants under contract to the facility or corporation

Make sure all members of the Pollution Prevention Team are familiar with the requirements of the MSGP, the facility, and the SWP3 for the facility.

Pollution Prevention Team Responsibilities, Part III Section A.2.b (page 43)

The Pollution Prevention Team is responsible for the development, implementation, maintenance, and revisions to the SWP3. The SWP3 should clearly define all team members' responsibilities. An individual may have multiple responsibilities depending on facility and staff size. Include team members' contact phone number with their assignments to give non-team member employees the ability to locate a team member when needed.

Examples of duties related to the SWP3 include, but are not limited to:

- stormwater sampling
- periodic inspections
- rain gauge monitoring
- SWP3 revisions
- maintenance of Best Management Practices (BMPs) and erosion controls
- non-stormwater investigations
- good housekeeping measures
- maintenance of exposed inventory lists
- site map development and maintenance
- spill prevention and response

- employee training and documentation
- maintenance of spill and leak log
- annual comprehensive site compliance evaluation

Description of Potential Pollutant Sources: Worksheet 3

Inventory of Exposed Materials, Part III Section A.3.a (page 43)

The Pollution Prevention Team must develop an inventory of materials currently handled at the facility that may be exposed to rainfall. This list must include all materials that are handled, stored, processed, treated, or disposed of in a manner that allows exposure to rainfall or runoff. The inventory of exposed materials must also include specific pollutants (e.g. oil and grease, copper, wood shavings, etc.) that can be attributed to those materials. It is mandatory to update the inventory within 30 days of a significant change in the types of materials that are exposed to rainfall or runoff, or within 30 days of a significant change in the types of materials exposed to stormwater that were not already included in the inventory. A significant change in material management practices is a change that would either result in initial exposure of a material not already listed in the inventory, or result in an increased exposure of an already listed material.

The inventory does not have to include any materials stored in drums, barrels, tanks, and similar containers that are tightly sealed, in **good** structural condition, and do **not** have leaking valves.

Description of Potential Pollutant Sources: Worksheet 4

Narrative Description of Potential Pollutant Sources, Part III Section A.3.b (page 44)

Develop a narrative description to describe all activities and potential sources of pollutants that may add pollutants to stormwater discharges or that may result in non-stormwater discharges from the facility.

Examples of activities and potential sources of pollutants that may be described in this section are:

- loading and unloading areas (including areas where chemicals and other materials are transferred)
- outdoor storage areas
- outdoor processing areas

- dust producing activities
- on-site waste disposal
- vehicle and equipment maintenance, cleaning, and fueling areas (including areas where vehicles are stored awaiting maintenance)
- liquid storage tank areas
- railroad sidings, tracks, and rail cars
- potential spill locations
- location onsite of significant spills and leaks that occurred onsite in the past three years.

The narrative description must be updated within 30 days following a change in the types or quantities of materials or in material management practices that may affect the exposure of materials to rainfall.

Site Map: Worksheet 5

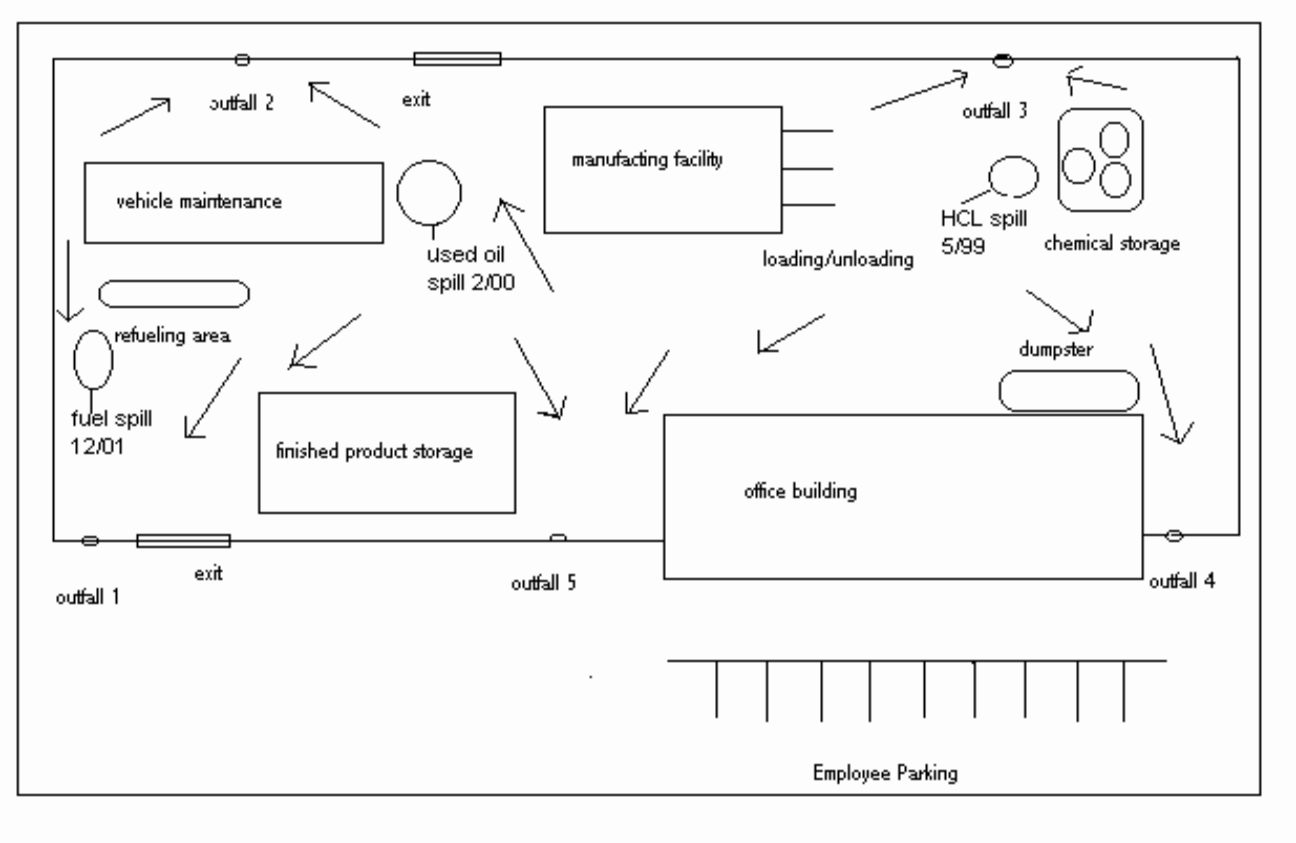
Site Map, Part III Section A.3.c & d (page 44)

Develop a site map (or maps) that includes the following:

- the location of each outfall
- an outline of the drainage area within the facility's boundary for each stormwater outfall
- connections or discharges to municipal separate storm sewer systems
- the location of all structures (e.g. buildings, storage, tanks, vehicle storage areas, etc.)
- structural control devices designed to reduce pollution in stormwater runoff
- process wastewater treatment units (including ponds)
- bag house and other air treatment units exposed to rainfall or runoff
- landfills, scrap yards, surface water bodies (including wetlands)
- vehicle fueling and exposed maintenance areas
- physical features of the site that may influence runoff
- the locations where reportable quantity spills or leaks have occurred during the three years before the Notice of Intent (NOI) for coverage under this permit was submitted
- process areas, storage areas, or other locations where materials are exposed to rainfall or runoff

The site map should clearly show the flow of stormwater runoff to each outfall. You may develop a series of maps if the amount of information would cause a single map to be difficult to read and interpret. The site map may be hand drawn and should receive updates as facility changes occur.

Figure 1: Example Site Map



Description of Potential Pollutant Sources: Worksheet 6

Spills and Leaks, Part III Section A.3.e & f (page 45)

The SWP3 must contain a list of reportable quantity spills and leaks of toxic or hazardous pollutants. A reportable quantity spill is one where the amount of material spilled requires it be reported to the TCEQ at (800) 832-8224 and/or the National Response Center at (800) 424-8802. Regulations concerning reportable quantities can be found at Title 30 Texas Administrative Code (TAC) §327.4. In the list, describe spills and leaks that occurred during the three years before the NOI was submitted. Also include all other spills within the last five years, even if they were not of reportable quantity. You must update the list quarterly to include additional spills and leaks, if they occur while operating under the MSGP.

Pollution Prevention Measures & Controls: Worksheet 7

Best Management Practices, Part III Section A.4.a (page 46)

You must develop a section in the SWP3 that describes the best management practices (BMPs) used to reduce the discharge and potential discharge of pollutants in stormwater. In developing BMPs, consider the activities and potentials for contamination identified in Part III, Section A.4 of the MSGP, "Pollution Prevention Measures and Controls" (Worksheet 3).

BMPs, like good housekeeping measures, may be everyday operating procedures that aid in the prevention of exposure of pollutants to stormwater. BMPs may also be structural controls such as covered storage racks. There may be sector specific pollution prevention measures listed in Part V of the MSGP that may be required to be addressed as a BMP. Worksheet 7 allows space to list multiple BMPs at a facility location. Though an exact date is not required, at a minimum, you should list a month and year, or quarter and year to demonstrate advances made in stormwater pollution prevention, and updates made to the SWP3 annually.

When developing BMPs, consider the following:

- storage of materials
- maintenance programs for equipment and machinery
- spill prevention and cleanup activities
- stormwater management equipment
- standard operating procedures that may have positive effects on discharge

Pollution Prevention Measures & Controls: Worksheet 8

Good Housekeeping Measures, Part III Section A.4.b (page 46)

Ensure that areas of the facility that contribute or potentially contribute pollutants to stormwater discharges are maintained in a clean, orderly manner. Good housekeeping is one of the most important aspects of stormwater pollution prevention efforts. An investigator is much less likely to find an area of concern in a well maintained facility than they would in a disorderly one.

Examples of areas that could contribute stormwater pollutants include, but are not limited to:

- areas around the trash containers

- outdoor storage areas
- loading docks
- outdoor processing areas

Good housekeeping must include measures to eliminate or reduce exposure of trash and debris, prior to their proper disposal, to rainfall or runoff. Typical good housekeeping measures include activities performed on a daily basis by employees during the course of normal work activities. Good housekeeping measures must be incorporated as a part of the **employee training program** to ensure that all employees know the company's policies and how their responsibilities affect compliance.

Pollution Prevention Measures & Controls: Worksheet 9

Erosion Control Measures, Part III Section A.4.c (page 47)

Your SWP3 must also address soil erosion. Controls should be evaluated and used, as necessary, to prevent soil loss in areas of the facility that have the potential for erosion. If the facility does not utilize any erosion-control measures, it should be noted in the plan that erosion is not an issue on site.

At a minimum, evaluate the following controls:

- soil stabilization through the use of vegetative cover (i.e., grass, weeds, etc.)
- contouring slopes
- paving
- installation of structural controls

Pollution Prevention Measures & Controls: Worksheet 10

Maintenance Program for Structural Controls, Part III Section A.4.d (page 47)

Establish a maintenance program for stormwater structural controls.

Inspect the following structural controls on a regular basis:

- oil/water separators
- catch basins
- sediment ponds
- grass swales
- berms

- any other controls used on-site

The SWP3 must establish **maintenance** frequencies for each of the controls at intervals that ensure effective operation.

Mechanical equipment that is part of a structural control, such as a stormwater pump or secondary containment drain valves, must also be inspected at intervals described in the SWP3 and maintained at intervals necessary to prevent failures that could result in a discharge of pollutants.

The SWP3 must **identify qualified personnel** to conduct inspections and establish inspection and maintenance schedules.

Records must document the estimated volumes of **solids removed** from catch basins, sediment ponds, and other similar control structures.

Pollution Prevention Measures & Controls: Worksheet 11

Spill Prevention and Response Procedures, Part III Section A.4.e (page 47)

Develop and implement a section of the SWP3 that addresses preventing spills and to allow for adequate spill response. This section must include the following:

- identification of areas where spills could contribute pollutants to stormwater discharges
- development and implementation of procedures to minimize or prevent contamination of stormwater from spills

Examples include, but are not limited to:

- training employees to inspect for leaks each day during operation of equipment
- installing overfill prevention devices on pumps and tanks
- requiring all tanks, drums, and similar containers to be properly labeled
- installing secondary containment structures around liquid storage tanks and drums
- inspecting drums, tanks, and similar containers routinely
- modifying material handling techniques
- requiring hazardous waste containers that require special handling, storage, use, and disposal be clearly marked
- developing and implementing specific spill prevention and cleanup techniques
- developing and maintaining an inventory of spill cleanup materials and equipment (spill kits)

- placing spill kits, readily available to employees, in strategic locations throughout the facility
- incorporating all of the above mentioned measures into your employee training program

Pollution Prevention Measures & Controls: Worksheet 12

Employee Training Program and Employee Education, Part III Section A.4.f (page 48)

Develop a section in the SWP3 that establishes a training program. Training must be offered to all employees who are responsible for implementing or maintaining activities identified in the SWP3.

At a minimum, employee training must include:

- proper material handling practices for specific chemicals, fluids, and any other materials used or commonly encountered at the facility
- spill prevention measures
- the location of materials and equipment necessary for spill clean-up
- spill cleanup techniques
- proper spill reporting procedures
- familiarization with good housekeeping measures, BMPs, and the overall goals of the SWP3

When developing the schedule for employee training sessions, you must consider pollutant potential, employee turnover rate, and other factors, as needed. Conduct training **at least once per year** and maintain all training activity records.

You also must offer education to employees at the facility who are not directly responsible for implementing or maintaining activities identified in the SWP3, and who do not participate in the employee training program. At a minimum, educate these employees of the SWP3's basic goal and how to contact the facility's Pollution Prevention Team about stormwater related issues.

Non-Stormwater Discharges: Worksheet 13

Non-Stormwater Discharges, Part III Section B.1. (page 49)

Non-stormwater discharges are defined as discharges from your facility that occur when it is not raining. Certain non-stormwater discharges are covered under this permit. They include:

- discharges from firefighting activities, fire hydrant flushing, or potable water sources (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life)
- lawn watering and similar irrigation drainage
- water from routine external washing of buildings, conducted without the use of detergents or other chemicals
- water from the routine washing of pavement conducted without the use of detergents or other chemicals, and where spills and leaks of toxic or hazardous materials have not occurred (unless all contaminated materials have been abated)
- boat rinse water from transportation facilities, such as marinas, where the boat rinse water does not contain chemicals, surfactants, or elevated temperatures and is not from pressure washing activities
- air conditioner condensate, compressor condensate, and condensate that externally forms on steam lines
- water from foundation or footing drains where flows are not contaminated with pollutants (e.g. process materials, solvents, and other pollutants)
- springs and other uncontaminated ground water
- discharges described in Part V of the permit that are subject to effluent guidelines and effluent limitations.

Non-Stormwater Discharges, Part III Section B.1.a. & b. (page 49)

The facility's Pollution Prevention team must conduct an investigation of potential non-stormwater discharges that are not approved by the permit. If the facility discharges into a separate storm sewer system, the team should also test the system or inspect it for the presence of non-stormwater flows. The designated Pollution Prevention Team member(s) must eliminate any potential sources that are discovered. Process wastewater must not be combined with stormwater discharges and must not be discharged off-site unless authorized under an individual TPDES permit.

Certification, Part III Section B.1.c (page 50)

The SWP3 must include a certification statement that an investigation of non-stormwater discharges was conducted and the discharge of non-permitted, non-stormwater discharges does not occur. The certification must include steps taken while conducting the evaluation, results of any testing, dates of evaluations or tests, and the portions in the separate storm sewer system, if any, that were observed during the investigation. The results of the investigation and the certification must be prepared and readily available for review within 180 days of filing for permit coverage.

Failure to Certify, Part III Section B.1.d (page 50)

If a part of the separate storm sewer system cannot be accessed to complete the evaluation, then the certification will cover the remainder of the system. Notice of this deficiency must be provided to the TCEQ within 180 days after permit coverage is obtained. Facilities that contribute stormwater discharges to a municipal separate storm sewer system (MS4) must provide notice of this deficiency **upon request**. The notice shall include an explanation of why the evaluation could not be performed and list in the certification all known potential, non-permitted, non-stormwater sources that could not be included in the evaluation.

Pollution Prevention Measures & Controls: Worksheet 14

Routine Facility Inspections, Part III Section B.2 (page 50)

Qualified personnel who are familiar with permit requirements and the industrial activities performed at the facility must conduct periodic inspections to determine the effectiveness of the following:

- good housekeeping measures
- spill prevention and response measures
- erosion control measures
- maintenance program for structural controls
- best management practices
- employee training program

Periodic inspections must occur on a frequency of once per quarter, unless otherwise specified in Part V of the MSGP that relates to specific requirements for industrial activities.

On-site inspections must be documented by the use of a checklist that includes each of the controls and measures being evaluated. The periodic inspection checklist must remain available for review upon request.

When revisions or additions to the SWP3 are recommended as a result of inspections, you must attach a summary description of these proposed changes to the inspection checklist. The summary must identify any necessary time frames required to implement the proposed changes.

Annual Comprehensive Compliance: Worksheets 15 & 16

Comprehensive Site Compliance Evaluation and Report, Part III Section B.5.a&b (page 53)

The comprehensive site compliance evaluation is a required site inspection and an overall assessment of the effectiveness of the current SWP3. This evaluation is in addition to other routine inspections, but may substitute for one quarterly inspection.

Either one or more members of the Pollution Prevention Team will conduct the evaluation at least once per year. The evaluation must include:

- inspection of all areas identified in the Inventory of Exposed Materials section of the SWP3 (worksheet 3);
- inspection of all structural controls, including maintenance and effectiveness;
- inspection of all nonstructural controls, including BMP effectiveness, good housekeeping measures, and spill prevention;
- inspection of all reasonably accessible areas immediately downstream of each stormwater outfall authorized by this MSGP; and a review of all records required by the MSGP.

The report must be prepared within 30 days of performing the annual site compliance evaluation, and must include a narrative discussion of your facility's compliance with the current SWP3 and document the following:

- the personnel conducting the evaluation
- the dates of the evaluation
- any incidents of non-compliance

For the purposes of this inspection, a non-compliance incident is where an element of the SWP3 is either not implemented, or where specific conditions of the permit are not met. If the report indicates an incident of non-compliance, you must complete all necessary actions to achieve compliance as soon as practicable, but no later than 12 weeks following the completion of the report. If the Pollution Prevention Team does not discover any incidents of non-compliance, the report will contain a certification that the facility is in compliance with the SWP3.

Either include the report as part of the SWP3 or reference it in the SWP3. The report must remain readily available for review by authorized personnel upon request.

Annual Comprehensive Compliance: Worksheet 17

Revision to the SWP3, Part III Section B.5.c (page 55)

Revise the SWP3 to include and address the findings of the Site Compliance Evaluation Report within 12 weeks following the completion of the report. Revisions must include all applicable changes that result from the report and all applicable updates to:

- elements of the SWP3 that require modification for effectiveness
- any additional elements (e.g. structural controls of BMPs) that should be added or modified for prevention of pollution
- the site map
- the inventory of exposed materials
- the description of good housekeeping measures
- the description of structural and nonstructural controls
- any other elements of the plan that were either found to be inaccurate or that will require modification

Annual Plan Certification, Part III Section E.6.c (page 67)

All reports and certification shall be signed by an authorized individual and in the manner required by Title 30 TAC §305.128 (relating to Signatories to Reports). The SWP3 must be signed and certified by an authorized representative of the facility. Without a signature from an authorized facility representative, the SWP3 in considered non-compliant with the MSGP permit.

Rain Gauge Monitoring and Recordkeeping: Worksheet 18

Rain Gauge Monitoring and Recordkeeping, Part III Section D.1.c (page 58)

Maintain a rain gauge on-site or utilize a rain gauge in the immediate vicinity of the site to determine when a qualifying rain event occurs. A representative storm event is precipitation that:

- is measurable,
- causes runoff at the outfall, and
- occurs at least 72 hours (3 days) after the previous storm event.

At a minimum, the rain gauge must be monitored:

- once per week, and
- once per day during a storm event

The rain gauge monitoring log should be included in your SWP3. Monitoring may be temporarily suspended during a given monitoring period if a representative storm event has occurred and the required sampling and analysis has been conducted.